



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/569,317

02/22/2006

Jiecai Gan

NFE-105

7888

56352

7590

08/16/2010

GLOBAL IP SERVICES

7285 W. Eagle Court

Winton, CA 95388

EXAMINER

YOUNKINS, KAREN L

ART UNIT

PAPER NUMBER

3751

MAIL DATE

DELIVERY MODE

08/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,317	Applicant(s) GAN, JIECAI	
	Examiner KAREN YOUNKINS	Art Unit 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 19, 21, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 19, 21, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responsive to the amendment dated 6/10/2010. Claims 11, 19 21, and 29-30 are currently pending in the case.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in China on 9/19/2003. It is noted, however, that applicant has not filed a certified copy of the 03238311.8 application as required by 35 U.S.C. 119(b).

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it includes legal phraseology such as "comprises," and it is not in proper idiomatic English. Correction is required. See MPEP § 608.01(b).

Art Unit: 3751

5. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

6. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: The term 'conduct' is used throughout the specification as a non-art known term. The term 'adjustable' is used to describe the operation of the air valve 44, however the air valve 44 is only disclosed as being rotatable about its pivot (page 5). The term 'adjustable' is an inappropriate term to describe this operation.

7. In the remarks submitted 6/10/2010, the applicant indicated that a substitute specification and abstract in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) would be submitted after the claims are approved. It is respectfully requested that the applicant provide a substitute specification in proper idiomatic English at this time. The disclosure is unclear as discussed above, and does not provide support for many of the claimed elements as discussed below.

Claim Objections

8. Claim 30 is objected to because of the following informalities: "the exhausting apparatus..." should be --The exhausting apparatus--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 11, 19, 21, and 29-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

11. The claimed limitation of a "pipe tee" recited in claim 19 was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. A discussion of a 'pipe tee' was not found.

12. The use of both an air separate plate and two inlets as now set forth in claim 11 was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. The combination of these limitations appears to be a hybrid embodiment of the embodiment of figure 2 having an air separate plate and the embodiment depicted in figure 3 having two inlets each directed from a toilet. The specification does not discuss how these two embodiments could be combined.

13. Regarding Claim 29, the specification as originally filed does not disclose the inlet for the water closet being a butterfly air vent valve nor the air valve of the inlet for the toilet being a gate air vent valve as claimed in new claim 29.

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3751

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 11, 19, 21, and 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. These grammatical and idiomatic errors render the claims indefinite. Examples rendering claim 11 indefinite include “the distribution of exhausting air displacement for the exhaust fan is realized”, “an outlet of the exhaust fan is connected to outdoor through a duct”. In claim 21, the language “wherein an overflow tube in water tank of a water closet is connected...” renders the claim indefinite. In claim 30, “a hole is opened on the back of the toilet bowl”.

17. Regarding claim 11, it is unclear what the relationship between water closet and toilet is. Line 8 states “a water closet in a toilet”, indicating that the water closet and toilet are at least in part the same structure. The new limitations set forth in lines 20-26 seem to indicate that the water closet is separate from the toilet. The specification does not disclose the water closet being separate from the toilet, as such for the purposes of examination the examiner assumed that an inlet of the air dividing case is connected to a toilet/water closet satisfies this limitation. Regarding claim 19, it is unclear what portion of the system the claimed 'duct' is referring to as this is not discussed in the specification. Further, Claim 30 recites “the back of the toilet bowl” and “the inlet for

Art Unit: 3751

water closet of the air dividing case". There is insufficient antecedent basis for these limitations in the claim.

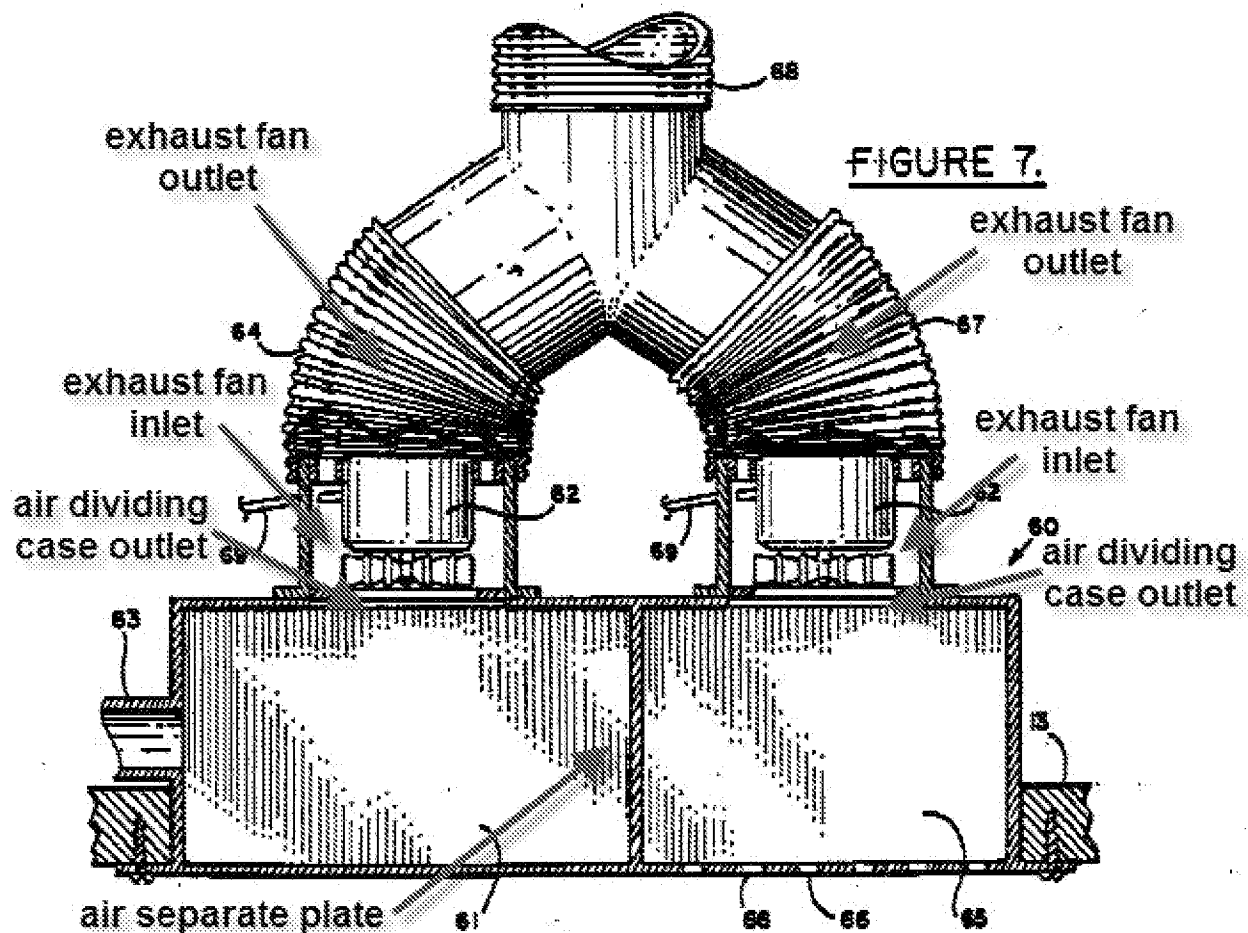
18. In light of the rejections above and the confusing nature of the specification, the claims are examined as best understood.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 11, 21, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,010,600 to Prisco in view of U.S. Patent No. 5,029,316 to Fernald, Sr. (Fernald).



21. Regarding claim 11, Prisco discloses, with attention drawn particularly the embodiment disclosed in figure 7, an exhausting apparatus with an air dividing case (surrounding compartments 61 and 65) for a water closet (10) comprising an air dividing case having an inner chamber (61/65) with an outlet at a top of the air dividing case (see examiner annotated drawing above) and an inlet (via 63) connected with a water closet (see column 4 lines 12-14). The exhausting apparatus also includes an exhaust fan (62) with an outlet and inlet connected with the outlet of said inner chamber (see examiner annotated drawing above) that is fixed on top of the air dividing case as

Art Unit: 3751

claimed. The outlet of the exhaust fan is connected, or 'open', to the outdoors through a duct (67), see column 4 lines 16-22. Further, Prisco discloses the inner chamber having through holes via the screened openings 66. The screen/'lid' covering the openings is 'moveable' on and off of the openings. The inner chamber has an 'air separate plate' inside of it, see examiner annotated drawing above. The 'air separate plate' divides the inner chamber into two chambers (61 and 65) such that one chamber (61) leads to the water closet (10). Prisco also discloses the use of the 'air separate plate' dividing the inner chamber into dual compartments may be required in rooms having a plurality of toilets, see column 4 lines 22-24. Further, the outlet is separated by the air separate plate into two parts to the extent claimed, and the apparatus is installed on a ceiling of a room housing a toilet (see figure 1). The apparatus is "open" to the toilet as it is connected to the toilet via the air system.

Prisco fails to show an air valve located between the inner chamber inlet and the inner chamber. Prisco also fails to disclose the second chamber (65) leading to another water closet/toilet.

Fernald teaches an air valve (36) as claimed, see column 4 lines 17-24. The air valve (36) is located between the inlet (designated by arrow pointing towards 70 in Figure 1) and an inner chamber (48). Fernald teaches the use of such an air valve results in prevention of air entering the inner chamber when it is not in operation, see column 2 lines 5-10.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the 'adjustable' air valve located between the

Art Unit: 3751

inner chamber inlet and the inner chamber as taught by Fernald in the exhausting apparatus of Prisco to prevent entry of air into the inner chamber when not operating. It would have been further obvious to have connected the second chamber 65 to another water closet/toilet, as Prisco discloses the chamber as claimed may be required in rooms having a plurality of toilets. Therefore, one part of the outlet is connected with one of the water closets (toilets) and the other part of the outlet is connected to the other water closet (toilet).

The initial statement of intended use (claim 11 line 2), and all other functional implications have been fully considered but do not appear to impose any patentably distinguishing structure over that disclosed by Prisco and Fernald.

22. Regarding claim 21, as previously discussed in pp-20 above, further Prisco fails to disclose the inlet of the inner chamber being connected via an overflow tube in the water tank of the flush closet. Instead, Prisco teaches the inlet of the inner chamber connected to the rear exhaust hole of the water closet.

With attention drawn to the embodiment disclosed in figures 6-8 of Fernald, Fernald teaches exhaust air being drawn out of an overflow tube (32) in the water tank (20) of a water closet via a duct (136) and into the inlet of an inner chamber (148).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have further modified the exhausting apparatus of Prisco as discussed in pp-16 and 17 above by connecting the inlet of the inner chamber to an overflow tube in the water tank of the flush closet via a duct in order to avoid the

Art Unit: 3751

unsightly connection of a conduit with the toilet's rear exhaust hole and inner chamber inlet.

23. Regarding claim 29, the examiner takes official notice that both butterfly and gate valves are well known in the art. To choose to use these valves as the air vent valve to any of the claimed water closet/toilets would be an obvious design choice to one having ordinary skill in the art.

24. Regarding Claim 30, as previously discussed in pp-20 above, further Prisco teaches the water closet including a water tank 20, a toilet bowl 10 located under the water tank, a hole 20 'opened' on the back of the toilet bowl and connected with the inlet through duct 31.

25. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prisco and Fernald as applied to claim 11 above, and further in view of USPN 4,165,544 to Barry.

26. As previously discussed in pp-20 above, further Prisco discloses the inlet of the inner chamber connected (via conduit 28/30/31) to the rear exhaust hole (20) of the water closet (10). Note, the exhaust leaves the water closet through the rear, s.f. 1.

Prisco fails to show the rear exhaust hole being a T shaped "pipe tee" in the arrangement claimed.

Barry teaches a T-type connector / "pipe tee" being known in the art to move air from a rear exhaust hole to an exhausting apparatus.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the exhausting apparatus of Prisco to have a T-

Art Unit: 3751

type rear exhaust hole in the claimed arrangement to accommodate for various size constraints of the specific plumbing and room constraints.

Response to Arguments

27. Applicant's arguments filed 6/10/2010 have been fully considered but they are not persuasive.

28. On page 6 the applicant has asserted that the toilet ceiling is shown in figures 2 and 3. The examiner respectfully disagrees. There is a toilet shown in figures 2 and 3, however a toilet ceiling is not shown. Further, it is unclear to the examiner what constitutes a toilet ceiling. The term "toilet ceiling" is not known in the art.

29. On page 6 the applicant has asserted that Claim 11 is supported by figure 2 and embodiment 2. The examiner respectfully disagrees. It is the position of the examiner that claim 11 is a hybrid embodiment of the embodiments in figure 2 and 3. Further the specification does not teach that these two embodiments may be combined.

30. On page 6 the applicant has asserted that valve 44 is a butterfly air vent valve according to common knowledge in the ventilation field. The examiner respectfully submits that the circle shown at 44 does not imply a butterfly air vent valve but instead could be a number of different valves or otherwise. There is nothing in the specification that states 44 is a butterfly valve.

31. On page 7 the applicant has asserted that the water closet is in the toilet room. The examiner respectfully submits that this does not describe the relationship between the claimed toilet and water closet as discussed in pp-16 above. The applicant

Art Unit: 3751

discusses this further on page 15 and says "one water closet in a room of toilet". It is unclear if there is one water closet/toilet or more than one.

32. Pages 9-10 display a chart showing what the applicant intends to be differences in the application and the prior art. It is the position of the examiner that the claims of the instant invention are fully addressed in the rejections above. It is noted that if a prior art reference has more than one structure, such as two air dividing cases, it does not imply that one of the cases can not meet the limitation of "one air dividing case", but rather that the prior art teaches an additional air dividing case. It is further submitted that the language in claim 11 line 3 "an air dividing case for distributing air displacement volume drawn from two separate compartments" is a functional recitation. The prior art need only be capable of performing this function. To the examiner's best understanding of the current claims the Prisco device as modified in the rejection above meets all of the structural limitations of the claim and is capable of performing the claimed function.

33. On page 10 the applicant has asserted that the exhaust fan can exhaust air from both the water closet and the toilet. It is respectfully submitted by the examiner that the claim needs to be amended to specifically structurally claim the water closet and toilet as two separate structures if the applicant intends them to be two separate structures. The language "water closet" and "toilet" are used interchangeably in the art and the confusing nature of the specification does not set forth what the applicant sees as different in these two structures, or if they are actually the same structure.

Art Unit: 3751

34. On page 10 the applicant has asserted that Prisco has two exhaust fans while the claim only requires one exhaust fan. The additional exhaust fan of Prisco does not prevent the one exhaust fan from meeting the claim limitation of "one exhaust fan".

35. On pages 10-11 the applicant has asserted that it would be impossible to one having ordinary skill in the art to have modified Prisco to meet the limitations of Claim 11. The examiner respectfully disagrees, as discussed in the rejection above.

36. On pages 11 and 15 the applicant has asserted the air valve of the instant invention is a regulation valve for air volume. The valve 36 of Fernald is also a regulation valve for air volume. When open, air volume flows through the duct. When closed, air volume does not flow through the duct.

37. On page 11 the applicant has asserted that there is no motivation to modify Prisco. The examiner respectfully disagrees and believes she has provided ample motivation in the rejection above.

38. On page 11 the applicant has asserted that there is no reasonable expectation of success. The examiner respectfully disagrees. The device of Prisco with the addition of a valve to open/close air from a duct would be reasonably successful to one having ordinary skill in the art.

39. Page 12 references a copy of the examiner's action that has been annotated by the applicant in the places where the applicant disagrees with the examiner. It is respectfully submitted that the comments are unreadable as they appear to be on a copy of a copy. It is respectfully submitted that if the applicant would like the examiner

Art Unit: 3751

to consider these comments they be submitted in writing as part of the arguments section in the next response.

40. On page 13 the applicant has asserted “the exhaust air in the water set is drawn through the T-shaped pipe tee”. The examiner does not understand this statement. A water set is not described in the claims nor the specification.

41. On page 13 the applicant has asserted that the resistance force for the exhaust air in claim 1 of the present invention is much lower than Barry. This argument is not commensurate with the scope of the claims. There is no “resistance force” claimed in the claims. Claim 1 is not pending in the application.

42. In pages 13-14 the applicant has asserted that the exhaust hole of Prisco is at the seat of the water closet instead of inside the toilet bowl. It is respectfully submitted that this argument is not commensurate with the scope of the claims as they do not require the hole being inside the toilet bowl. Further, it is noted that exhaust holes inside of the toilet bowl are shown in other cited prior art references.

43. On page 14 the applicant has asserted there is no suggestion for motivation and no reasonable expectation of success for the rejection of claim 19 because the resisting force is greatly reduces, the exhausting force is big, and the appearance is good. This argument is not commensurate with the scope of the claims. Resisting force, exhausting force, and appearance are not required by the claims.

44. On pages 15-16 the applicant refers to the drawings as showing difference in the application and the prior art. Patentability is not determined by the drawings. It is the

Art Unit: 3751

claims that are examined on the merits, and the examiner believes the claims as currently written have been addressed fully in this and all previous actions.

Conclusion

45. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAREN YOUNKINS whose telephone number is (571)270-7417. The examiner can normally be reached on Monday through Friday 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. Y./

Examiner, Art Unit 3751

/Gregory L. Huson/

Supervisory Patent Examiner, Art Unit 3751